

ESTABLISHED 1845

# W. & L. E. GURLEY

Makers of Engineering and Surveying Instruments

TROY, N. Y.

BRANCH: SEATTLE, WASH.

### **Products.**

TRANSITS; LEVELS; PLANE TABLES; ALIDADES.

Also, Compasses; Sketching Cases; "Beaman" Stadia Arc.

Leveling Rods; Stadia Rods; Flagstaffs; Tripods.

Automatic Water Stage Registers; "Price" Hydraulic Current Meters; Hook Gages.

Dealers in Chains, Tapes, Aneroid Barometers, Anemometers, Binoculars, Field Glasses, Drawing Instruments and Materials, Scientific Books, etc.

### **Manufacture.**

From raw material to finished product every detail is of Gurley construction, thus insuring a perfection of manufacture—a precision of operation and adjustment—which has secured for Gurley instruments merited recognition among leaders of the engineering profession. The Gurley has been the accepted *Standard of Quality* for three-quarters of a century, which is evidenced by its close identification with big engineering accomplishments, both past and present.

### **Guarantee.**

All instruments, when purchased directly of this company, are warranted correct in all their parts; and in the event of any original defect appearing after reasonable use, the company agrees to repair or replace with new and perfect instruments, promptly at its own cost, express charges included; or money and express charges paid by purchaser will be refunded.

### **Prices, Terms and Catalogue.**

Prices will be quoted promptly on request.

Terms: Net cash, f. o. b. Troy, N. Y., or Seattle, Wash.; or c. o. d. with privilege of examination, if requested. Safe delivery guaranteed.

Illustrated catalogue describing this company's complete line will be sent to any one free of charge, on request.

### **General Characteristics of Gurley Transits.**

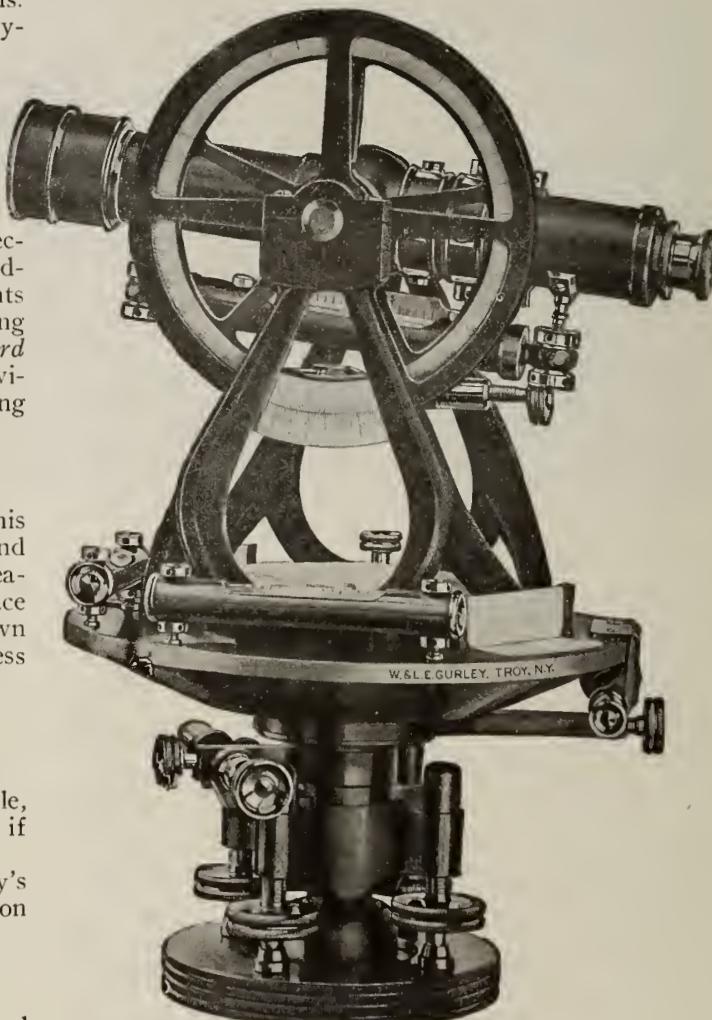
Long compound tapered centers; 4-screw ribbed leveling head; shifting center; radially ribbed and dished limb and plate; horizontal and vertical limbs graduated on *sterling silver*; waterproof flush verniers at  $30^{\circ}$  to line of sight, reading to  $1'$ ; waterproof compass box, with variation arc; sensitive telescope level; superior quality telescope lenses with brilliant illumination, flat field and sharp definition; erecting eyepiece, *platinum* cross wires and stadia wires; telescope reverses either end; center point on top; dust guard. Packed in mahogany box, with plummet, reading glass, etc.

LIMB I—Figured in two rows, the outer row 0 to  $360^{\circ}$ , the inner row in quadrants 0 to  $90^{\circ}$ .

LIMB IV—Two rows of opposite inclined figures, 0 to  $360^{\circ}$ .

### **Gurley Precise Transits with One Piece Truss Standard.**

Designed especially for railroad, bridge, municipal and other work requiring the highest degree of precision.



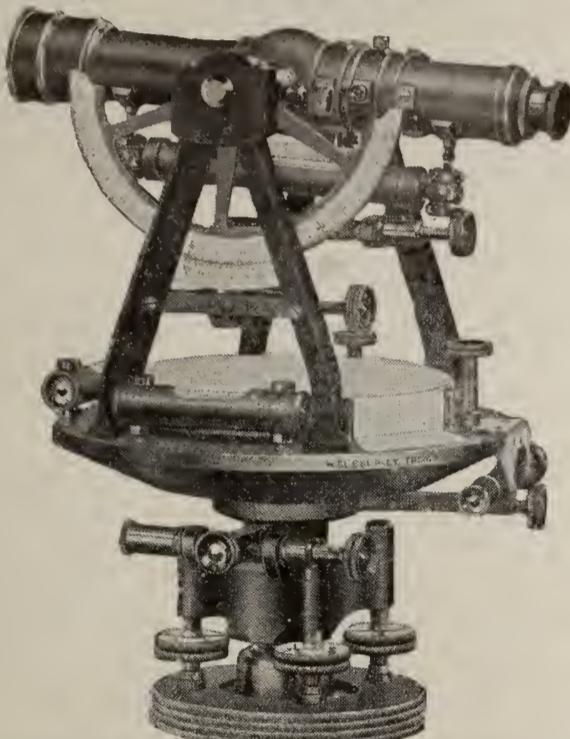
NO. 8-A, or NO. 27-A PRECISE TRANSIT

|                                      | No. 8-A    | No. 27-A       |
|--------------------------------------|------------|----------------|
| Diameter of horizontal limb, in..... | 6.25       | 5.65           |
| Length of needle, in.....            | 3.5        | 3              |
| Length of telescope, in.....         | 11         | 8              |
| Power of telescope, diameters.....   | 26         | 20             |
| Length of telescope level, in.....   | 7.2        | 5              |
| Diameter of vertical limb, in.....   | 5          | 4.5            |
| Vertical limb reads to.....          | 1'         | 1'             |
| Tripod with cap.....                 | Split legs | Extension legs |
| Weight of instrument, lbs.....       | 16         | 12             |
| Weight of tripod, lbs.....           | 11         | 10             |
| Shipping weight, 2 boxes, lbs.....   | 75         | 70             |

Regularly furnished with Limb IV, but Limb I will be substituted if desired. Vertical arc, instead of full vertical circle with aluminum guard, will be substituted, if desired.

A gradiometer will be combined with the clamp and tangent to telescope axis, if desired.

## Gurley Light Mountain or Mining Transits.



NO. 28 LIGHT MOUNTAIN OR MINING TRANSIT

*The best known transit in America*

Horizontal limb, 5.65 in. diameter. Graduated to 30', and figured like Limb I (Limb IV figuring, if desired, at no extra cost). Reading by two opposite double verniers to 1'. Compass needle, 4 in. long. Variation arc. Telescope, 8 in. long. Power 20 diameters. Platinum cross wires and stadia wires. Level on telescope, 5 in. long. Vertical arc, 2½ in. radius, graduated to 30' and reading to 1'. Angle-section standards with ample bases.

Extension leg tripod, closing to 36 in., weights 10 lbs. Instrument packed in mahogany box.

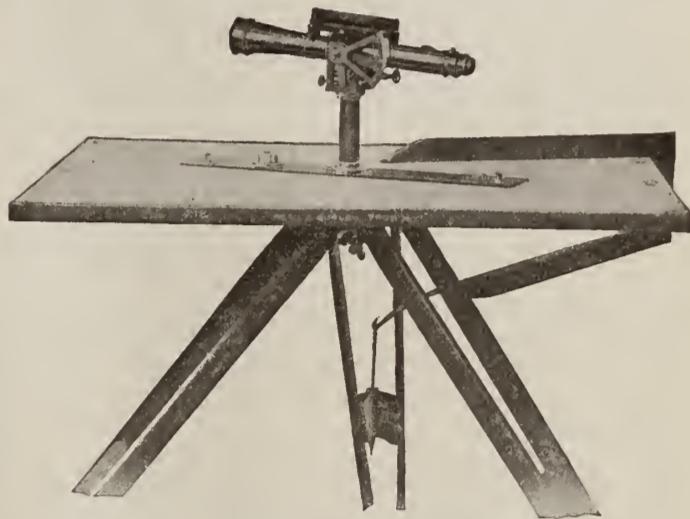
Weight of instrument, 11 lbs. Shipping weight, in 2 boxes, about 65 lbs.

If desired, a 4½-in. diameter vertical circle with aluminum guard, will be substituted for the vertical arc.

A gradiometer will be combined with the clamp and tangent to telescope axis, if desired.

## Gurley Plane Table Outfits.

This outfit consists of No. 570 Johnson movement, with split leg tripod, weighing about 10 lbs.; No. 573 drawing board, size 31 by 24 in., with brass screw plate fitted, and with 8 clamp screws and sockets for fastening the paper; flexible canvas case for the drawing board; No. 574 plumbing arm and plummet; and No. 584-C alidade, with 11-in. telescope, inverting eyepiece with diagonal prism, power about 22 diameters, enlarged objective, 1¾-in. aperture, platinum cross wires and stadia wires; detachable striding level; edge graduated vertical arc reading to 1', combined with Beaman stadia arc; clamp and tangent to telescope axis; blade 18 by 3 in., with left-hand edge beveled; circular level, and box compass with 4-in. needle, mounted on blade. Alidade packed in mahogany carrying case.



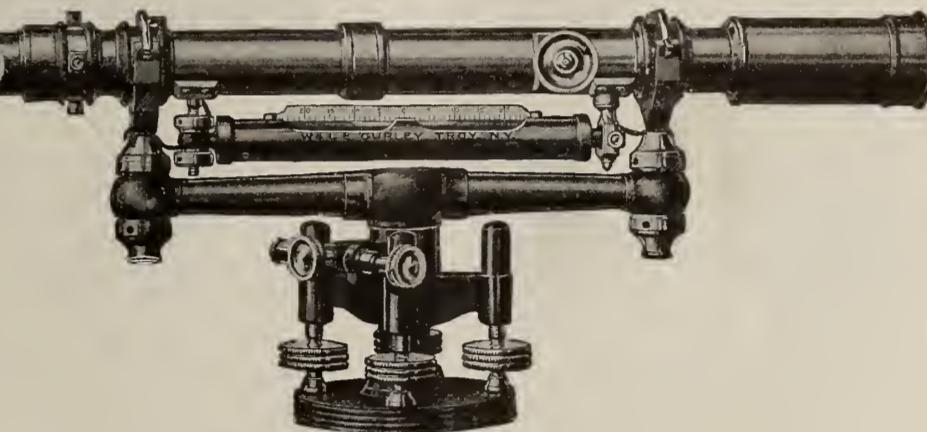
NO. 576-C PLANE TABLE OUTFIT WITH JOHNSON MOVEMENT AND NO. 584-C ALIDADE

*U. S. Geological Survey Standard*

## Gurley Engineers Wye Levels.

The performance record of the Gurley wye level extends over a period of 70 years, and is the best recommendation any instrument could have.

The Gurley level is the standard with which all other levels are compared. It is universally preferred for its accuracy, stability, ease and permanence of adjustment, and long wearing qualities.



NOS. 375, 377 OR 378 ENGINEERS WYE LEVEL

|   | No. 375 | No. 377 | No. 378 |
|---|---------|---------|---------|
| Length of telescope, in.....                                | 22      | 18      | 15      |
| Power of telescope, diameters.....                          | 42      | 32      | 26      |
| Aperture of objective, in.....                              | 1¾      | 1¾      | 1¾      |
| Least focusing distance, from center of instrument, ft..... | 12      | 8½      | 8½      |
| Length of telescope level, in.....                          | 10½     | 8½      | 8½      |
| Weight of instrument, lbs.....                              | 14½     | 13½     | 11½     |
| Weight of tripod, with solid round legs, lbs.....           | 10      | 10      | 10      |
| Shipping weight, 2 boxes, lbs.....                          | 75      | 65      | 60      |

On No. 378, the eyepiece is focused by spiral movement, instead of pinions. The objective slide is without dust guard.